GROUP 26

FRONT AXLE

CONTENTS

SERVICE SPECIFICATIONS

M1261000300783

Item		Standard value	Limit
Wheel bearing axial play mm		–	0.05
Wheel bearing starting torque N·m	4A9	–	1.6
	4G1	–	1.76
Protruding length of stabilizer bar mounting bolt mm	4A9	19 ± 1.5	–
Protruding length of stabilizer link assembly mm	4G1	5 ± 1.5	–
Setting of TJ boot length mm		80 ± 3	–
Opening dimension of the special tool (MB991561) mm	When the EBJ boot band (small) is crimped	3.9	–
	When the EBJ boot band (large) is crimped	3.9	–
Crimped width of the EBJ boot band mm		1.2 – 4.5	–

NOTE: EBJ: Eight Ball Fixed Joint

LUBRICANTS

M1261000400810

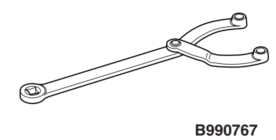
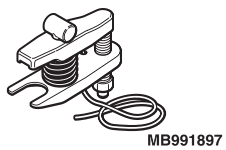
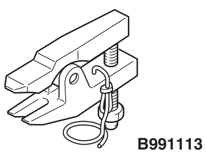
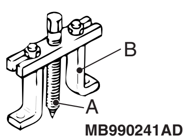
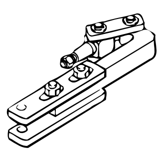
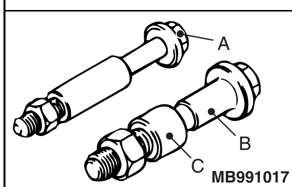
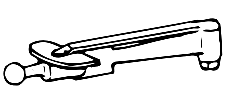
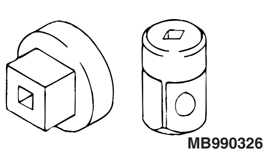
Item	Specified lubricant		Quantity
TJ	Repair kit grease	4A9	100 ± 10 g
		4G1	150 ± 6 g
ETJ	Repair kit grease		115 ± 10 g
EBJ	Repair kit grease		70 ± 10 g
BJ	Repair kit grease		95 ± 10 g

NOTE: EBJ: Eight Ball Fixed Joint

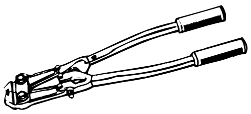
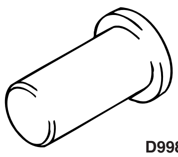
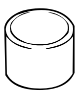
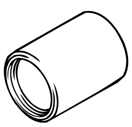
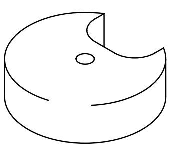
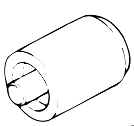
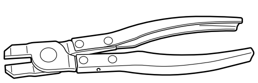
Main Index
Group TOC

SPECIAL TOOLS

M1261000600966

Tool	Number	Name	Use
	MB990767	Front hub & flange yoke holder	Fixing of hub
	MB991897 or MB992011	Ball joint remover	Knuckle and ball joint disconnection <4A9> *NOTE: Steering linkage puller (MB990635 or MB991113)is also used to disconnect knuckle and tie rod end ball joint.*
	MB991113	Steering linkage puller	Knuckle and ball joint disconnection <4G1>
	MB990241 A:MB990242 B:MB990244	Axle shaft puller A: Puller shaft B: Puller bar	• Removal of driveshaft • Hub assembly removal
	MB991056 or MB991355	Knuckle arm bridge	Removal of hub
	A:MB991017 B:MB990998 C:MB991000	A, B: Front hub remover and installer C: Spacer	• Provisional holding of wheel bearing • Measurement of wheel bearing starting torque • Measurement of wheel bearing axial play *NOTE: MB991000, which belongs to MB990998, should be used as a spacer.*
	MB990685	Torque wrench	Measurement of wheel bearing starting torque
	MB990326	Preload socket	

Main Index
Group TOC

Tool	Number	Name	Use
 MB990810	MB990810	Side bearing puller	Removal of wheel bearing outer inner race
 MB991561	MB991561	Boot band crimping tool	EBJ boot (resin boot) band installation
 D998382	MD998382	Crankshaft front oil seal installer	Removal of wheel bearing
 MB991389	MB991389	Bush remover base	Press-fitting of wheel bearing
 MB990890	MB990890	Rear suspension bush base	• Press-fitting of wheel bearing • Dust cover installation
	MD998338	Spring compressor	Dust cover installation
 MB990881	MB990880	Rear suspension bush arbour	Hub installation
 MB992194	MB992194	Boot band crimping tool	TJ boot band installation

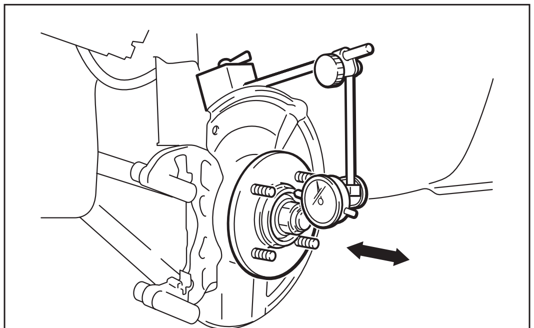
Main Index
Group TOC

ON-VEHICLE SERVICE

WHEEL BEARING AXIAL PLAY CHECK

M1261001100276

1. Remove the caliper assembly and suspend it with a wire (Refer to P.26-6, P.26-9).



AC208063AB

2. Attach a dial gauge as shown in the illustration, and then measure the axial play while moving the hub in the axial direction.

   Limit: 0.05 mm

3. If axial play exceeds the limit, replace the front wheel hub assembly.

Main Index
Group TOC

FRONT AXLE HUB ASSEMBLY

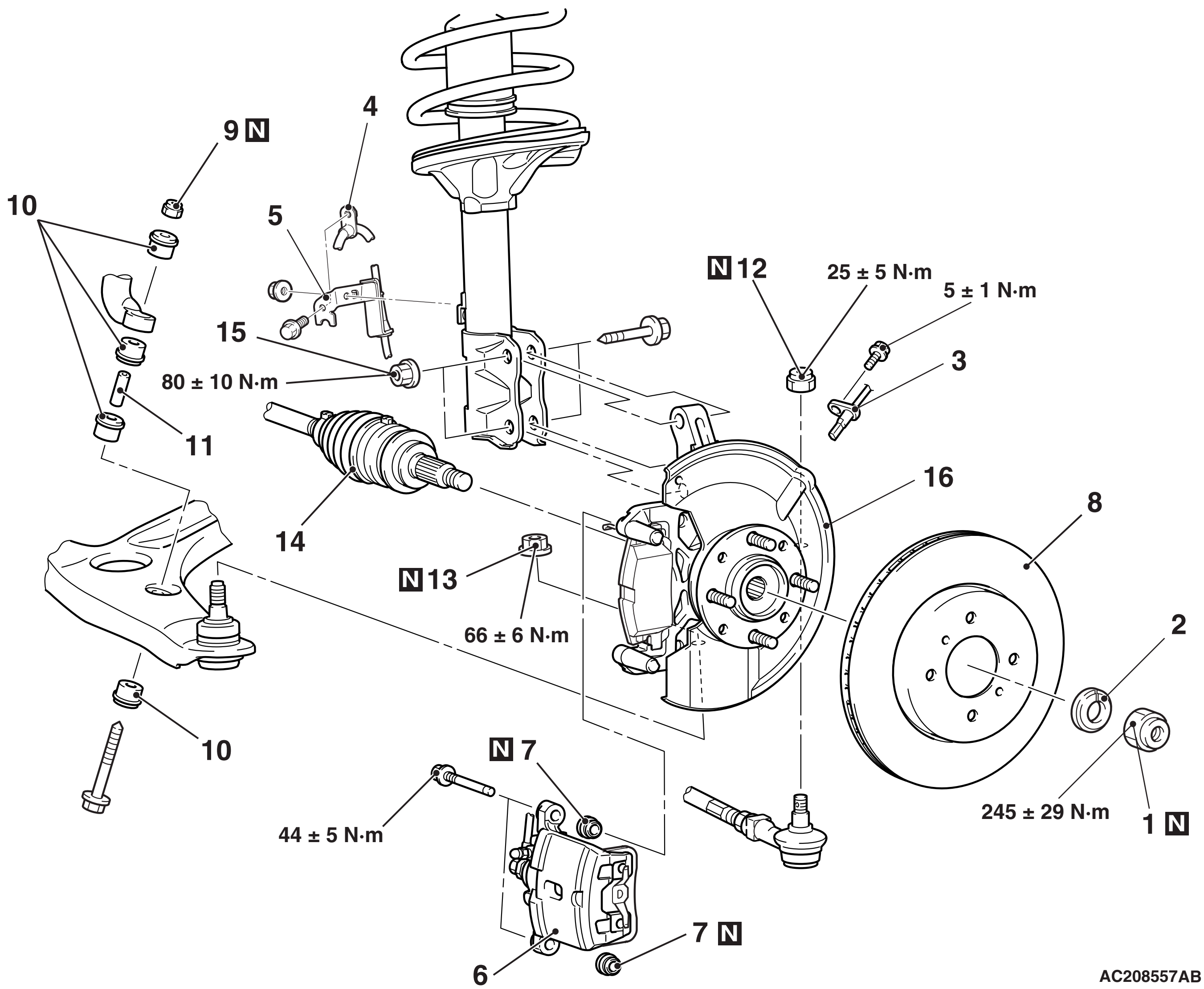
REMOVAL AND INSTALLATION
<VEHICLES WITH 14 INCH-DISC BRAKE>

M1261001700814

⚠ CAUTION

- **Do not disassemble the front wheel hub assembly.**
- **The magnetic encoder collects any metallic particle easily, because it is magnetized. Make sure that the magnetic encoder should not collect any metallic particle. Check that there is not any trouble prior to reassembling it.**
- **When the front wheel hub assembly is removed and installed, make sure that the magnetic encoder does not contact with surrounding parts to avoid damage.**
- **When the front wheel speed sensor is removed and installed, make sure that its pole piece does not contact with surrounding parts to avoid damage.**

Post-installation Operation
Check the dust cover for cracks or damage by pushing it with your finger.



AC208557AB

Removal steps

<<A>>	>>C<<	1.	Driveshaft nut
	>>C<<	2.	Washer

Removal steps (Continued)

3. Front wheel speed sensor
4. Brake hose bracket

Main Index
Group TOC

			Removal steps (Continued)
		5.	Front wheel speed sensor harness bracket
<<**B**>>		6.	Caliper assembly
	>>**B**<<	7.	Pin boot
<<**C**>>		8.	Brake disc
	>>**A**<<	9.	Self-locking nut
		10.	Stabilizer rubber
		11.	Collar

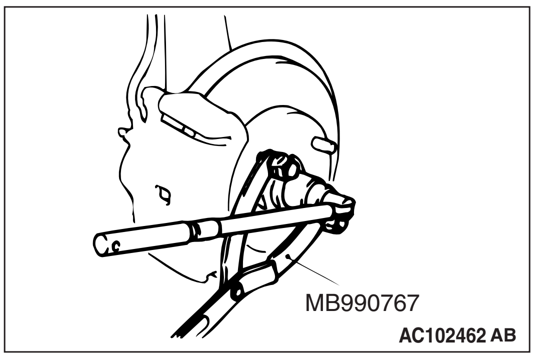
			Removal steps (Continued)
<<**D**>>		12.	Self-locking nut (tie rod end connection)
<<**D**>>		13.	Self-locking nut (lower arm ball joint connection)
<<**E**>>		14.	Driveshaft
		15.	Nut (hub and knuckle to strut connection)
		16.	Hub and knuckle assembly

REMOVAL SERVICE POINTS

<<A>> DRIVESHAFT NUT REMOVAL

⚠ CAUTION

Do not apply pressure to wheel bearing by the vehicle weight to avoid possible damage when driveshaft nut is loosened.

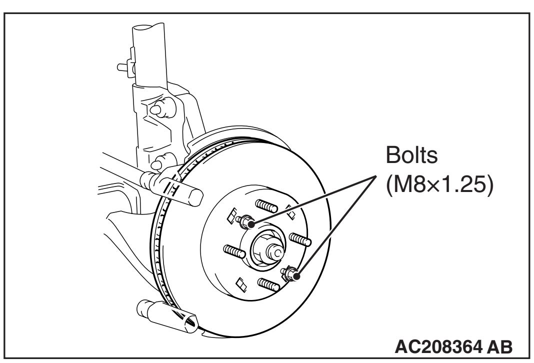


Use special tool front hub & flange yoke holder (MB990767) to fix the hub and remove the driveshaft nut.

<<B>> CALIPER ASSEMBLY REMOVAL

Secure the removed caliper assembly with wire, etc.

<<C>> BRAKE DISK REMOVAL

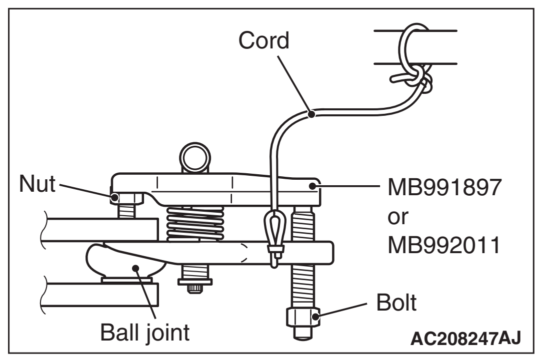


If the brake disc is seized, install M8 × 1.25 bolts as shown, and remove the disc by tightening the bolts evenly and gradually.

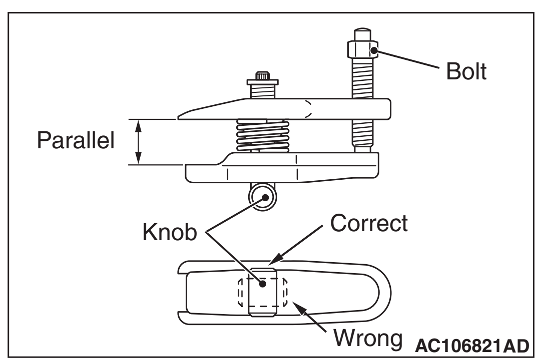
<<D>> SELF-LOCKING NUT (TIE ROD END CONNECTION)/SELF-LOCKING NUT (LOWER ARM BALL JOINT CONNECTION) REMOVAL

⚠ CAUTION

- **Do not remove the nut from ball joint. Loosen it and use the special tool to avoid possible damage to ball joint threads.**
- **Hang the special tool with cord to prevent it from falling.**



1. Install special tool ball joint remover (MB991897 or MB992011) as shown in the figure.



2. Turn the bolt and knob as necessary to make the jaws of special tool parallel, tighten the bolt by hand and confirm that the jaws are still parallel.

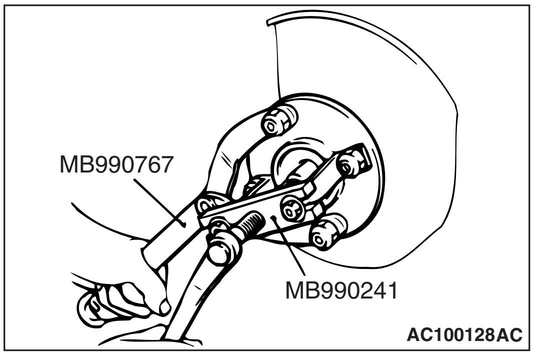
   NOTE: When adjusting the jaws in parallel, make sure the knob is in the position shown in the figure.
3. Tighten the bolt with a wrench to disconnect the tie rod end, lower arm ball joint.

Main Index
Group TOC

<<E>> DRIVESHAFT REMOVAL

⚠ CAUTION

- **The magnetic encoder collects any metallic particle easily, because it is magnetized. Make sure that the magnetic encoder does not collect any metallic particle.**
- **When the driveshaft is removed, make sure that it does not contact with the magnetic encoder to avoid damage.**

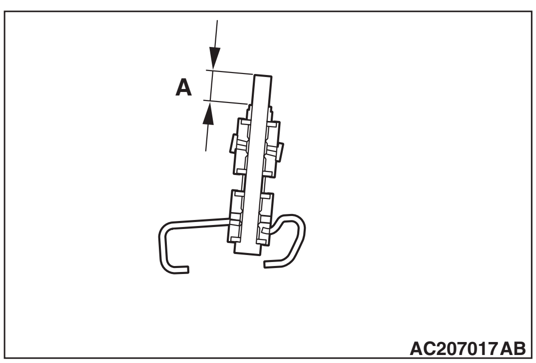


Use the following special tools to push out the driveshaft from the hub.

- Front hub & flange yoke holder (MB990767)
- Axle shaft puller (MB990241)

INSTALLATION SERVICE POINT

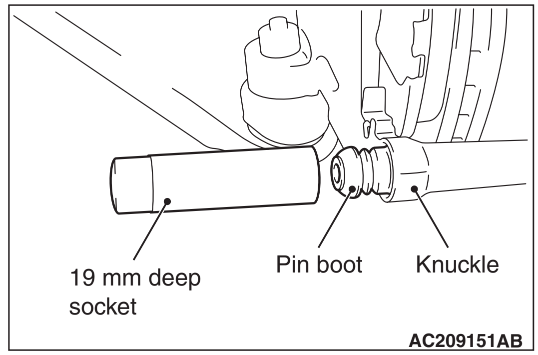
>>A<< SELF-LOCKING NUT INSTALLATION



Install the stabilizer rubber and collar as shown in the figure, and tighten the self-locking nut so that the protruding length of the stabilizer bar mounting bolt protruding part meets its standard value (A).

Standard value (A): 19 ± 1.5 mm

>>B<<PIN BOOT INSTALLATION

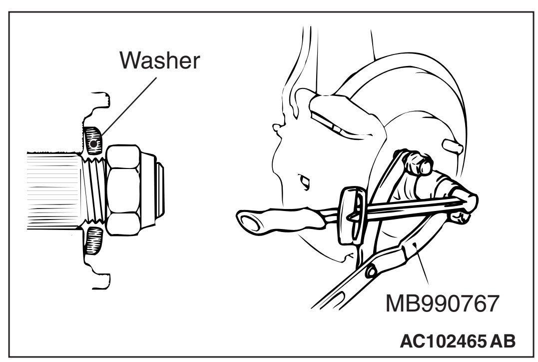


Use a 19 mm deep socket to drive a pin boot into the knuckle.

>>C<< WASHER/DRIVESHAFT NUT INSTALLATION

⚠ CAUTION

- **The magnetic encoder collects any metallic particle easily, because it is magnetized. Make sure that the magnetic encoder should not collect any metallic particle. Check that there is not any trouble prior to reassembling it.**
- **When the driveshaft is installed, make sure that it does not contact with the magnetic encoder to avoid damage.**
- **Before securely tightening the driveshaft nuts, make sure there is no load on the wheel bearings. Otherwise the wheel bearings will be damaged.**



1. Be sure to install the driveshaft washer in the specified direction.
2. Using special tool front hub & flange yoke holder (MB990767), tighten the driveshaft nut to the specified torque.

Tightening torque: 245 ± 29 N·m

Main Index
Group TOC

REMOVAL AND INSTALLATION <VEHICLES WITH 15 INCH-DISC BRAKE>

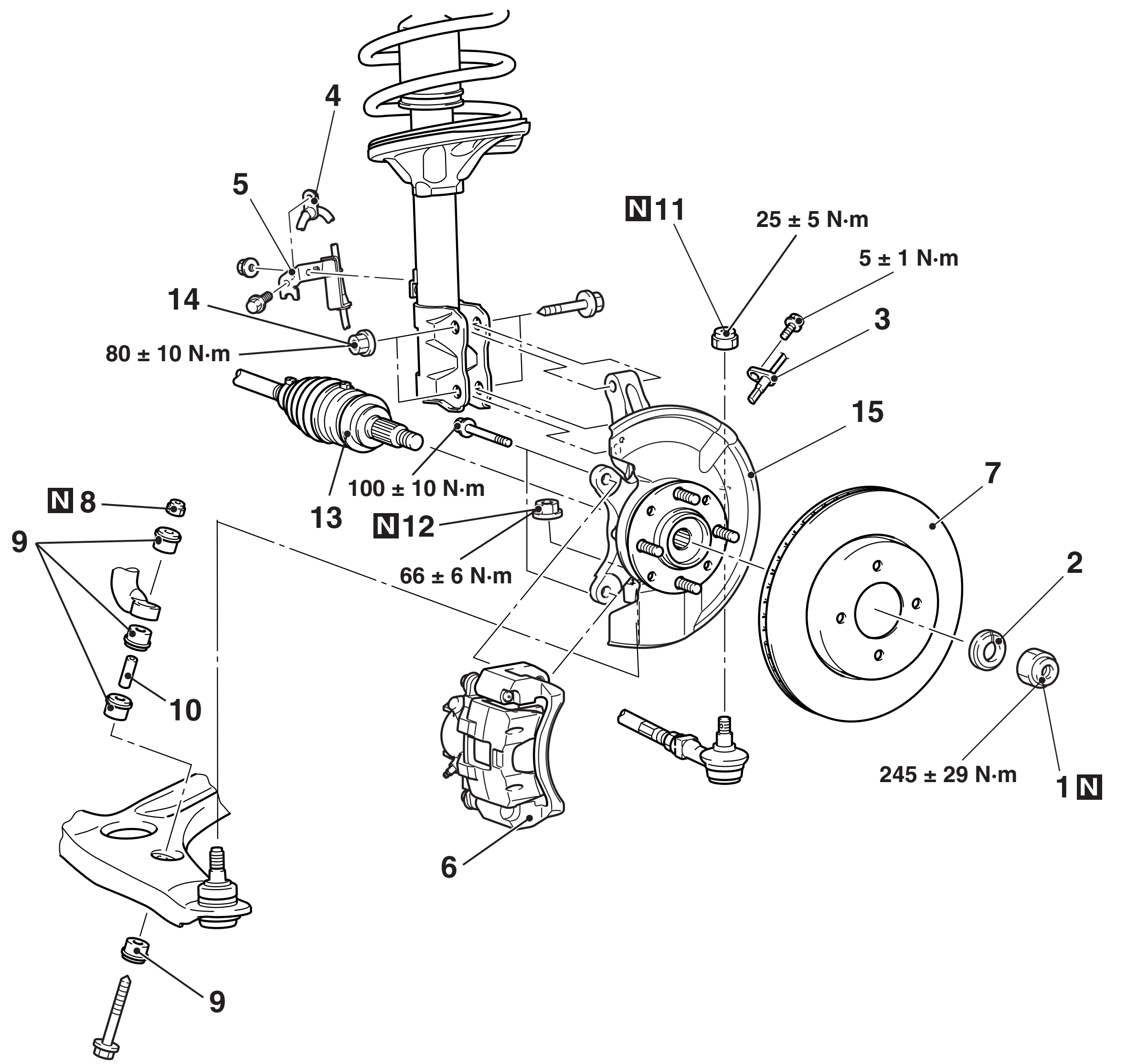
M1261001701033

⚠ CAUTION

- **Do not disassemble the front wheel hub assembly.**
- **The magnetic encoder collects any metallic particle easily, because it is magnetized. Make sure that the magnetic encoder should not collect any metallic particle. Check that there is not any trouble prior to reassembling it.**
- **When the front wheel hub assembly is removed and installed, make sure that the magnetic encoder does not contact with surrounding parts to avoid damage.**
- **When the front wheel speed sensor is removed and installed, make sure that its pole piece does not contact with surrounding parts to avoid damage.**

Post-installation Operation
Check the dust cover for cracks or damage by pushing it with your finger.

<4A9>



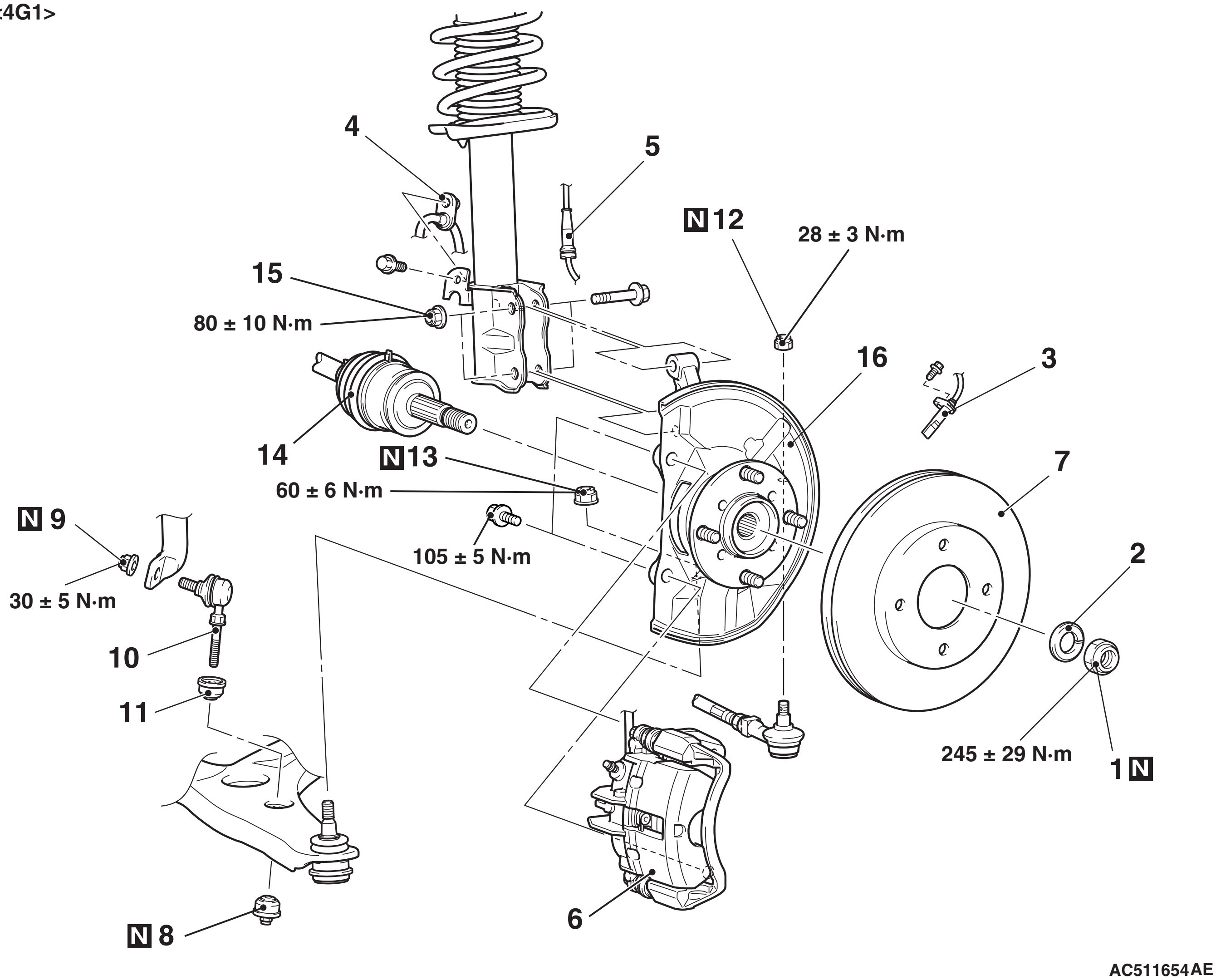
AC507587AC

Main Index
Group TOC

			Removal steps
<<A>>	>>B<<	1.	Driveshaft nut
	>>B<<	2.	Washer
		3.	Front wheel speed sensor
		4.	Brake hose bracket
		5.	Front wheel speed sensor harness bracket
<<B>>		6.	Caliper assembly
		7.	Brake disc
	>>A<<	8.	Self-locking nut
	>>A<<	9.	Stabilizer rubber

		Removal steps (Continued)
	10.	Collar
<<C>>	11.	Self-locking nut (tie rod end connection)
<<C>>	12.	Self-locking nut (lower arm ball joint connection)
<<D>>	13.	Driveshaft
	14.	Nut (hub and knuckle to strut connection)
	15.	Hub and knuckle assembly

<4G1>



			Removal steps
<<A>>	>>B<<	1.	Driveshaft nut
	>>B<<	2.	Washer
		3.	Front wheel speed sensor
		4.	Brake hose bracket
		5.	Front wheel speed sensor harness
<<B>>		6.	Caliper assembly
		7.	Brake disc
	>>A<<	8.	Stabilizer link bush (A)
	>>A<<	9.	Self-locking nut
		10.	Stabilizer link assembly
		11.	Stabilizer link bush (B)

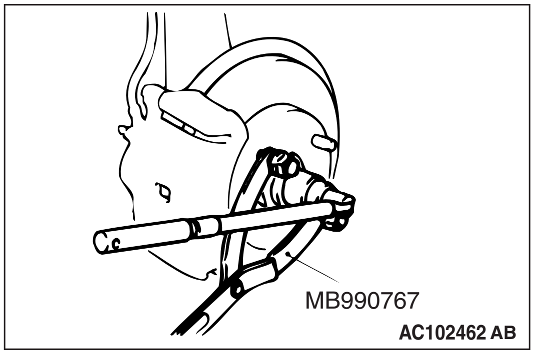
		Removal steps (Continued)
<<C>>	12.	Self-locking nut (tie rod end connection)
<<C>>	13.	Self-locking nut (lower arm ball joint connection)
<<D>>	14.	Driveshaft
	15.	Nut (hub and knuckle to strut connection)
	16.	Hub and knuckle assembly

REMOVAL SERVICE POINTS

<<A>> DRIVESHAFT NUT REMOVAL

⚠ CAUTION

Do not apply pressure to wheel bearing by the vehicle weight to avoid possible damage when driveshaft nut is loosened.



Use special tool front hub & flange yoke holder (MB990767) to fix the hub and remove the driveshaft nut.

<<B>> CALIPER ASSEMBLY REMOVAL

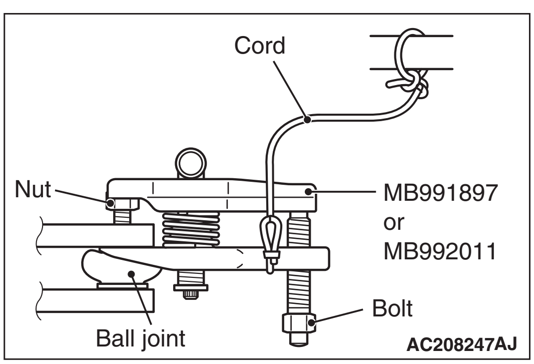
Secure the removed caliper assembly with wire, etc.

<<C>> SELF-LOCKING NUT (TIE ROD END CONNECTION)/SELF-LOCKING NUT (LOWER ARM BALL JOINT CONNECTION) REMOVAL

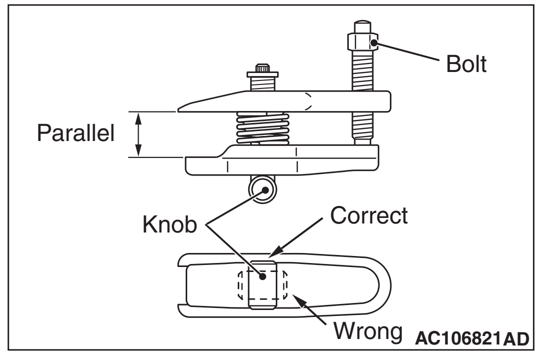
⚠ CAUTION

- **Do not remove the nut from ball joint. Loosen it and use the special tool to avoid possible damage to ball joint threads.**
- **Hang the special tool with cord to prevent it from falling.**

<4A9>



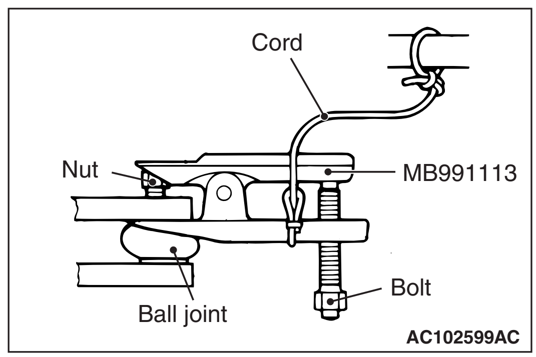
1. Install special tool ball joint remover (MB991897 or MB992011) as shown in the figure.



2. Turn the bolt and knob as necessary to make the jaws of special tool parallel, tighten the bolt by hand and confirm that the jaws are still parallel.

   NOTE: When adjusting the jaws in parallel, make sure the knob is in the position shown in the figure.
3. Tighten the bolt with a wrench to disconnect the tie rod end, lower arm ball joint.

<4G1>



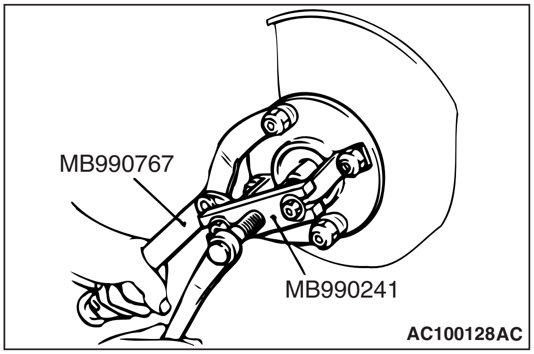
Replace the self-locking nut with a regular nut, and then install special tool steering linkage puller (MB991113) as shown in the figure.

Main Index
Group TOC

<<D>> DRIVESHAFT REMOVAL

⚠ CAUTION

- **The magnetic encoder collects any metallic particle easily, because it is magnetized. Make sure that the magnetic encoder does not collect any metallic particle.**
- **When the driveshaft is removed, make sure that it does not contact with the magnetic encoder to avoid damage.**



AC100128AC

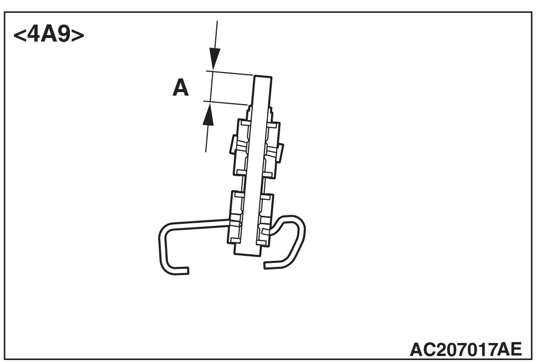
Use the following special tools to push out the driveshaft from the hub.

- Front hub & flange yoke holder (MB990767)
- Axle shaft puller (MB990241)

INSTALLATION SERVICE POINT

>>A<< STABILIZER RUBBER/SELF-LOCKING NUT/STABILIZER LINK BUSH (B)/STABILIZER LINK ASSEMBLY/STABILIZER LINK BUSH (A) INSTALLATION

<4A9>

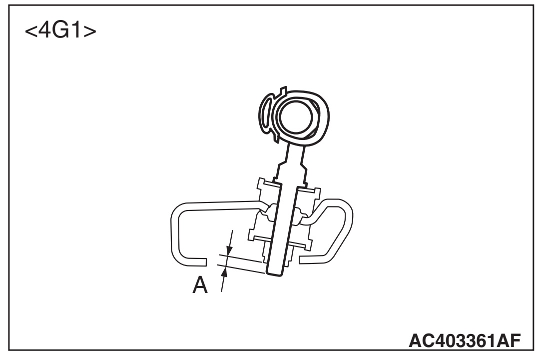


AC207017AE

Install the stabilizer rubber as shown in the figure, and tighten the self-locking nut so that the protruding length of the stabilizer bar mounting bolt meets its standard value (A).

Standard value (A): 19 ± 1.5 mm

<4G1>



AC403361AF

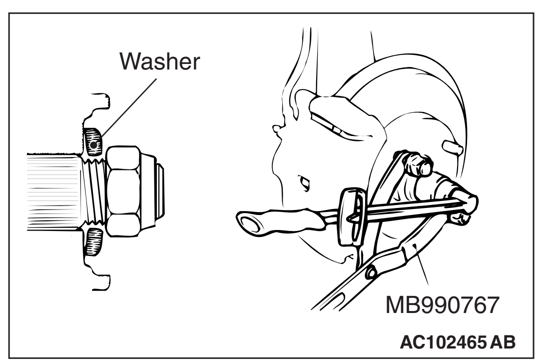
Install the stabilizer link bush (B), stabilizer link assembly and stabilizer link bush (A) as shown in the figure, and tighten the stabilizer link bush (A) so that the protruding length of the stabilizer link assembly meets its standard value (A).

Standard value (A): 5 ± 1.5 mm

>>B<< WASHER/DRIVESHAFT NUT INSTALLATION

⚠ CAUTION

- **The magnetic encoder collects any metallic particle easily, because it is magnetized. Make sure that the magnetic encoder should not collect any metallic particle. Check that there is not any trouble prior to reassembling it.**
- **When the driveshaft is installed, make sure that it does not contact with the magnetic encoder to avoid damage.**
- **Before securely tightening the driveshaft nuts, make sure there is no load on the wheel bearings. Otherwise the wheel bearings will be damaged.**



AC102465AB

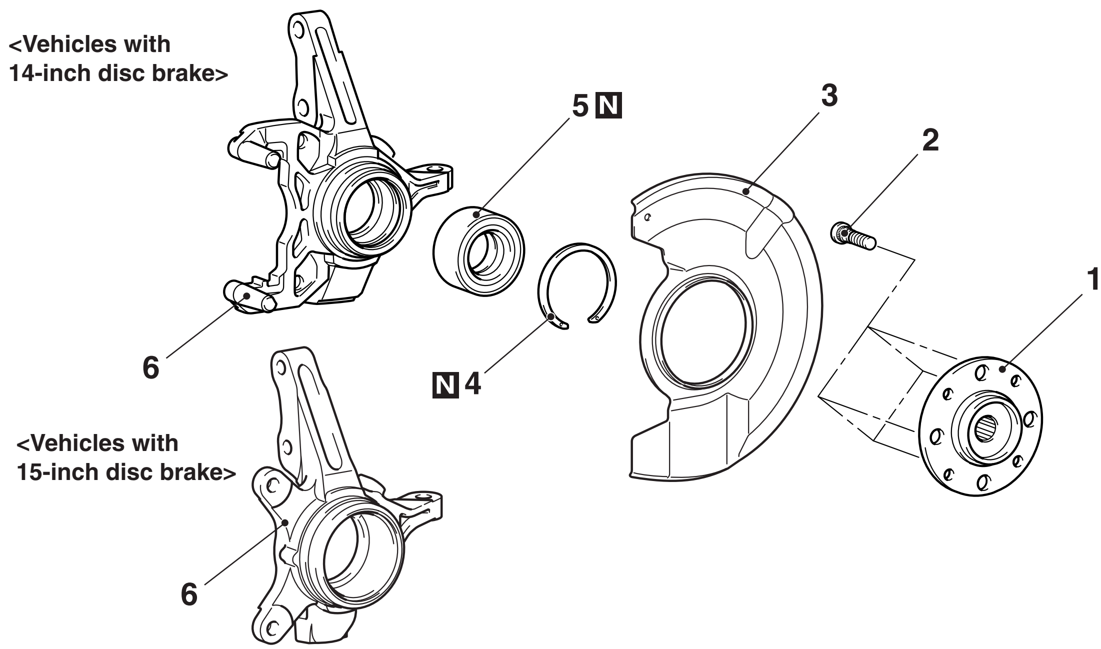
1. Be sure to install the driveshaft washer in the specified direction.
2. Using special tool front hub & flange yoke holder (MB990767), tighten the driveshaft nut to the specified torque.

Tightening torque: 245 ± 29 N·m

Main Index
Group TOC

DISASSEMBLY AND REASSEMBLY

M1261001900476



AC402026AD

Disassembly steps

<<**A**>>	1.	Front wheel hub
	2.	Hub bolt
	3.	Dust cover
	4.	Snap ring
<<**B**>>	5.	Wheel bearing
	6.	Knuckle

Reassembly steps

	6.	Knuckle
>>**A**<<	5.	Wheel bearing

Reassembly steps (Continued)

	4.	Snap ring
>>**B**<<	3.	Dust cover
	2.	Hub bolt
>>**C**<<	1.	Front wheel hub
>>**D**<<	•	Wheel bearing starting torque check
>>**E**<<	•	Wheel bearing axial play check

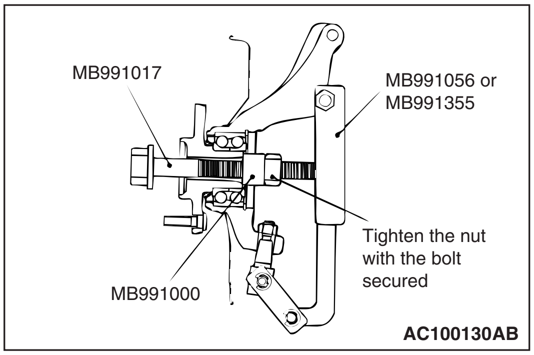
Main Index
Group TOC

DISASSEMBLY SERVICE POINTS

<<A>> FRONT WHEEL HUB REMOVAL

⚠ CAUTION

When the front wheel hub assembly has been removed, always replace it with a new part because wheel bearing frictional surface will be damaged when removing the front wheel hub assembly.



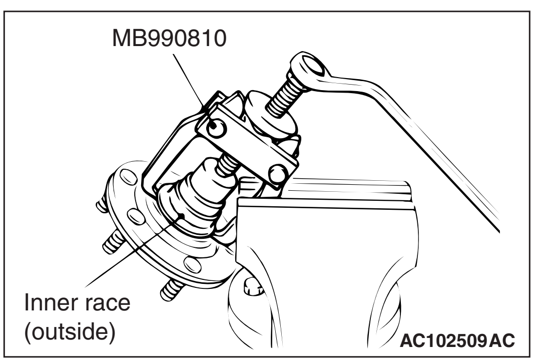
Use the following special tools to pull out the front wheel hub assembly from the knuckle.

- Knuckle arm bridge (MB991056 or MB991355)
- Front hub remover and Installer (MB991017)
- Spacer (MB991000)

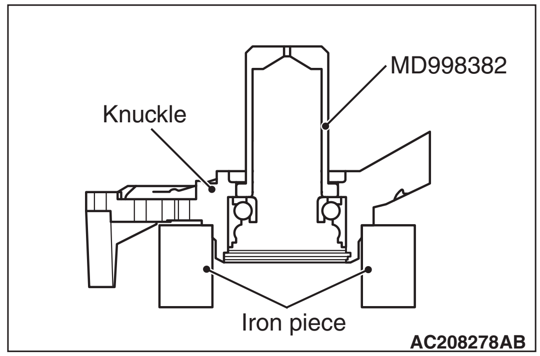
<<B>> WHEEL BEARING REMOVAL

⚠ CAUTION

When removing the inner race (outside) from the hub, be careful not to let the hub drop.



1. Remove the wheel bearing inner race (outside) from the front hub by using special tool side bearing puller (MB990810).

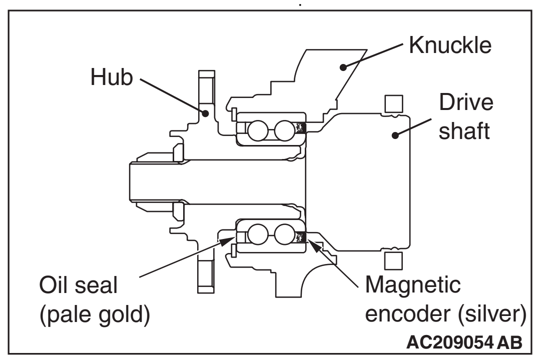


2. Use special tool crankshaft front oil seal installer (MD998382) to push out the wheel bearing.

REASSEMBLY SERVICE POINTS

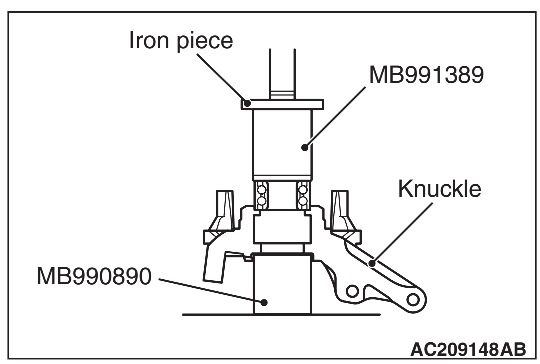
>>A<< WHEEL BEARING INSTALLATION

⚠ CAUTION



The magnetic encoder is integrated into the wheel bearing. Make sure that the wheel bearing is installed as shown in the illustration.

- **Press the outer race when pressing-in the wheel bearing. Otherwise the wheel bearing will be damaged.**

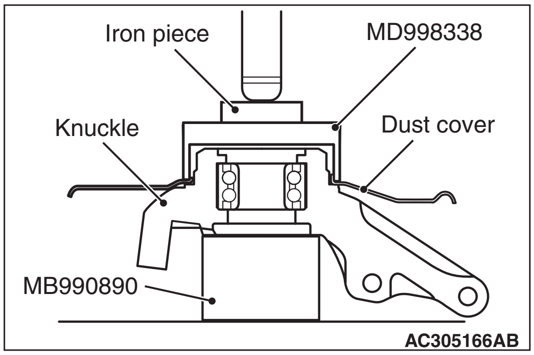


Press-in the bearing by using the following special tools.

- Rear suspension bush base (MB990890)
- Bush remover base (MB991389)

Main Index
Group TOC

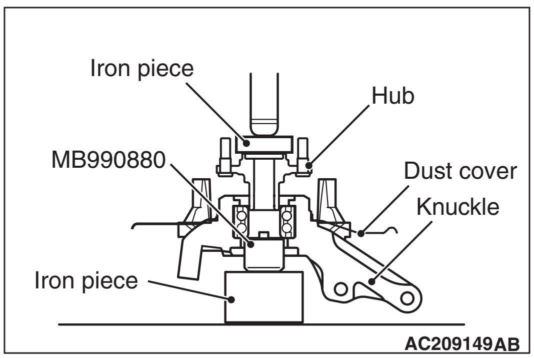
>>B<< DUST COVER INSTALLATION



Use the following special tools to install the dust cover.

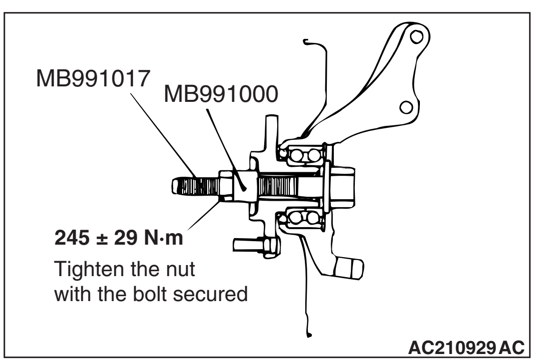
- Rear suspension bush base (MB990890)
- Spring compressor (MD998338)

>>C<< FRONT WHEEL HUB INSTALLATION

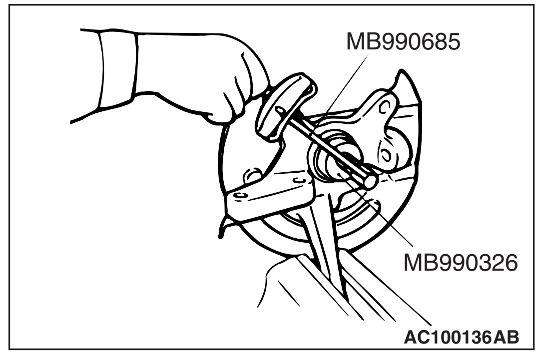


Use special tool rear suspension bush arbour (MB990880) to press-fit the front wheel hub.

>>D<<WHEEL BEARING STARTING TORQUE CHECK



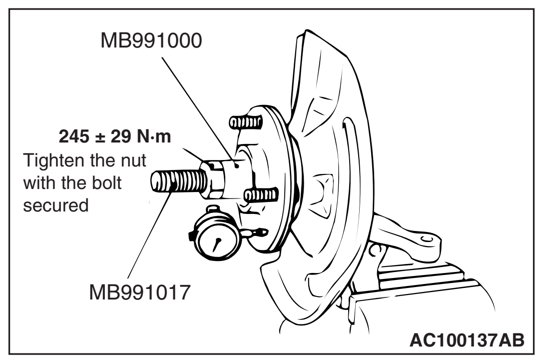
1. Tighten the following special tools to the specified torque, and then press-in the front wheel hub assembly into the knuckle.
   - Front hub remover and installer (MB991017)
   - Spacer (MB991000)
2. Rotate the hub in order to seat the bearing.



3. Measure the wheel bearing starting torque by using the following special tools.
   - Torque wrench (MB990685)
   - Preload socket (MB990326)

   Limit: 1.6 N·m <4A9>, 1.76N·m <4G1>
4. The starting torque must be within the limit and the hub rotation must be smooth.

>>E<<WHEEL BEARING AXIAL PLAY CHECK



1. Measure to determine whether the wheel bearing axial play is within the limit or not by using the following special tools.
   - Front hub remover and installer (MB991017)
   - Spacer (MB991000)

   Limit: 0.05 mm
2. If the play is not within the limit range while the nut is tightened to 245 ± 29 N·m, the bearing, hub and/or knuckle have probably not been installed correctly. Replace the bearing and re-install.

Main Index
Group TOC

DRIVESHAFT ASSEMBLY

REMOVAL AND INSTALLATION

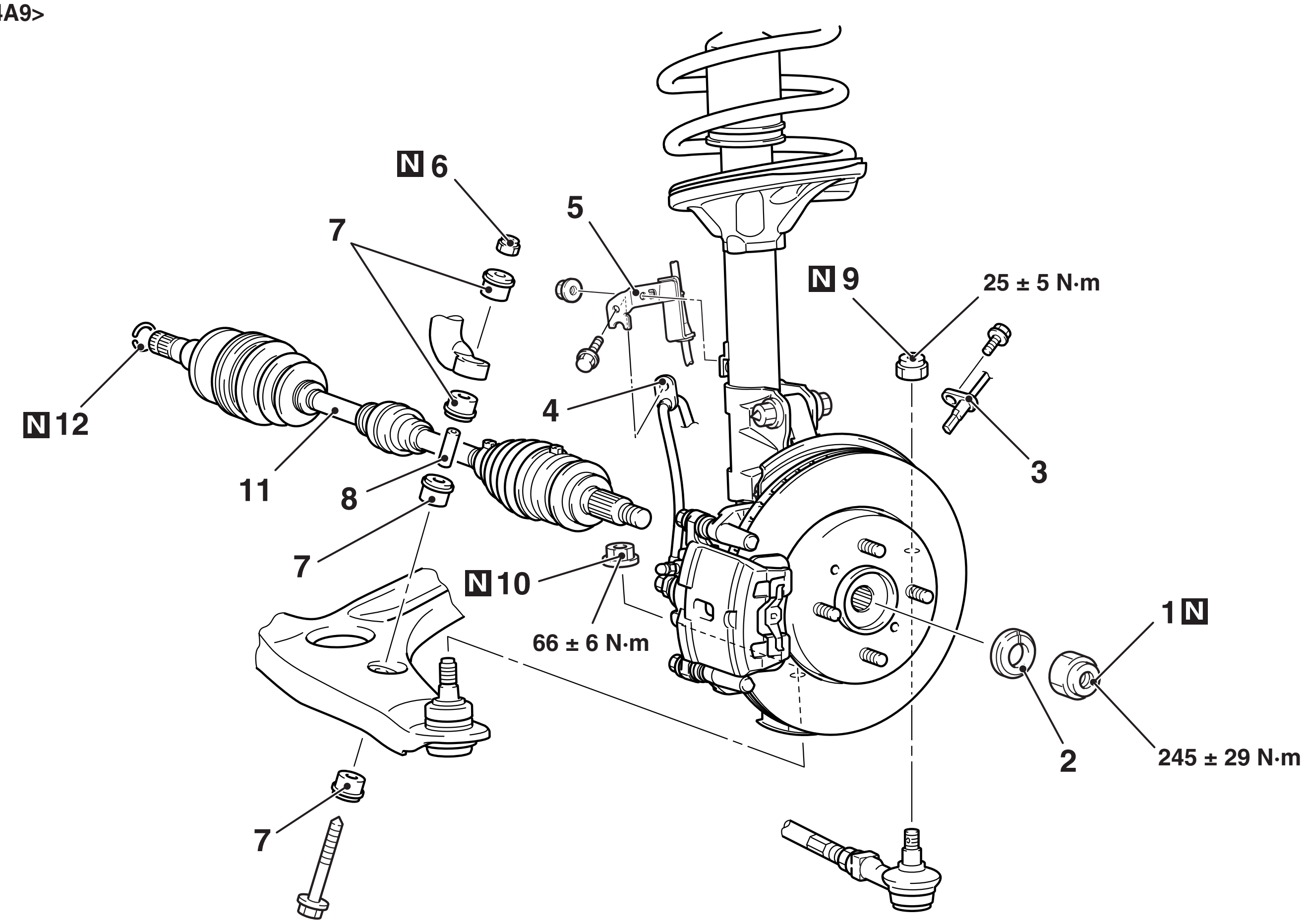
M1261003501046

⚠ CAUTION

- **The magnetic encoder collects any metallic particle easily, because it is magnetized. Make sure that the magnetic encoder should not collect any metallic particle. Check that there is not any trouble prior to reassembling it.**
- **When the driveshaft assembly is removed and installed, make sure that the magnetic encoder does not contact with surrounding parts to avoid damage.**
- **When the front wheel speed sensor is removed and installed, make sure that its pole piece does not contact with surrounding parts to avoid damage.**

Pre-installation Operation	Post-installation Operation
• Transmission Fluid Draining (Refer to GROUP 22, On-vehicle Service – Transmission Oil Replacement .), (Refer to GROUP 23, On-vehicle Service – Transmission Fluid (ATF) Replacement P.23A-133.) • Front Exhaust Pipe Removal (Refer to GROUP 15 – Exhaust Pipe and Main Muffler P.15-19, P.15-21.)	• Front Exhaust Pipe Installation (Refer to GROUP 15 – Exhaust Pipe and Main Muffler P.15-19, P.15-21). • Check the Ball Joint Dust Cover for cracks or damage by pushing it with your finger. • Transmission Fluid Filling (Refer to GROUP 22, On-vehicle Service – Transmission Oil Replacement .), (Refer to GROUP 23, On-vehicle Service – Transmission Fluid (ATF) Replacement P.23A-133).

<4A9>



AC207334 AE

Main Index
Group TOC

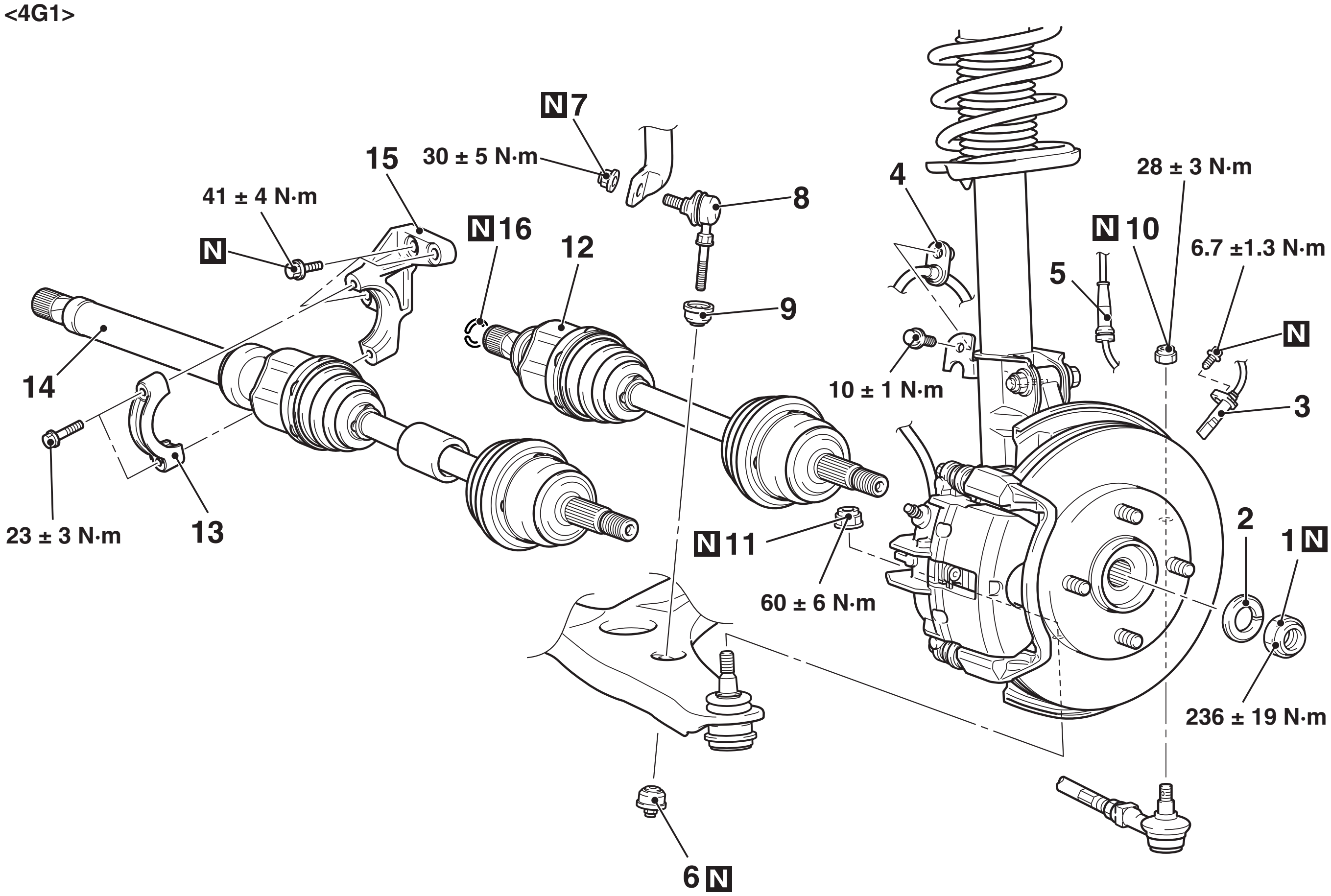
Removal steps

- <<A>> >>C<< 1. Driveshaft nut
- >>C<< 2. Washer
- 3. Front wheel speed sensor
- 4. Brake hose bracket
- 5. Front wheel speed sensor harness bracket
- >>B<< 6. Self-locking nut
- 7. Stabilizer rubber

Removal steps (Continued)

- 8. Collar
- <<B>> 9. Self-locking nut (tie rod end connection)
- <<B>> 10. Self-locking nut (lower arm ball joint connection)
- <<C>> >>A<< 11. Driveshaft assembly
- 12. Circlip

<4G1>



AC600487AB

Removal steps

- <<A>> >>C<< 1. Driveshaft nut
- >>C<< 2. Washer
- 3. Front wheel speed sensor
- 4. Brake hose bracket
- 5. Front wheel speed sensor harness and strut assembly connection
- >>B<< 6. Stabilizer link bush (A)
- 7. Self-locking nut
- >>B<< 8. Stabilizer link assembly
- >>B<< 9. Stabilizer link bush (B)

Removal steps (Continued)

- <<B>> 10. Self-locking nut (tie rod end connection)
- <<B>> 11. Self-locking nut (lower arm ball joint connection)
- <<C>> >>A<< 12. Driveshaft (LH)
- 13. Bracket cover
- <<C>> >>A<< 14. Driveshaft (RH)
- 15. Bracket
- 16. Circlip

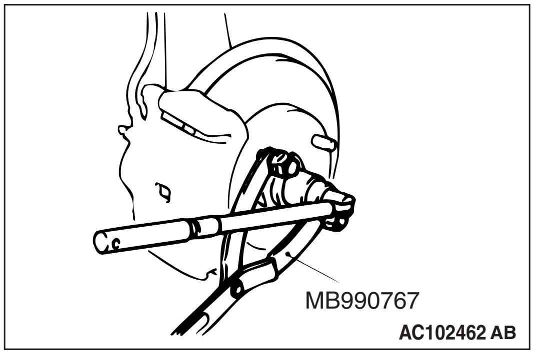
Main Index
Group TOC

REMOVAL SERVICE POINTS

<<A>> DRIVESHAFT NUT REMOVAL

⚠ CAUTION

Do not apply pressure to the wheel bearing by the vehicle weight to avoid possible damage when the driveshaft nut is loosened.



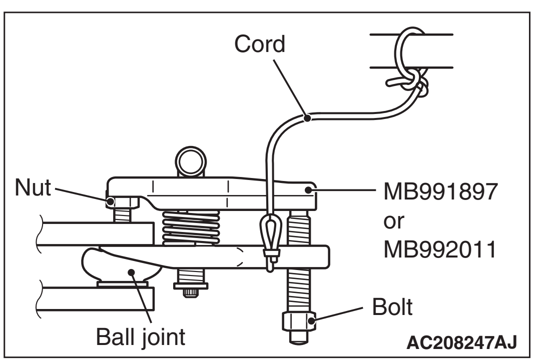
Use special tool front hub & flange yoke holder (MB990767) to fix the hub and remove the driveshaft nut.

<<B>> SELF-LOCKING NUT (TIE ROD END CONNECTION)/SELF-LOCKING NUT (LOWER ARM BALL JOINT CONNECTION) REMOVAL

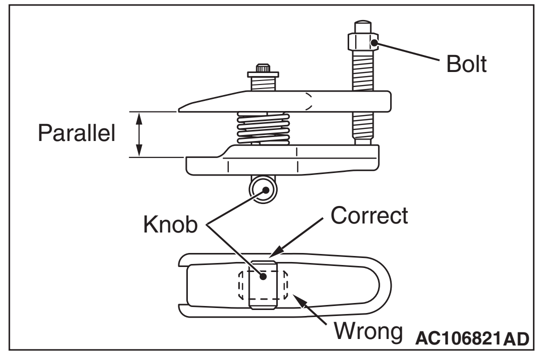
⚠ CAUTION

- **Do not remove the nut from ball joint. Loosen it and use special tool to avoid possible damage to ball joint threads.**
- **Hang special tool with cord to prevent it from falling.**

<4A9>



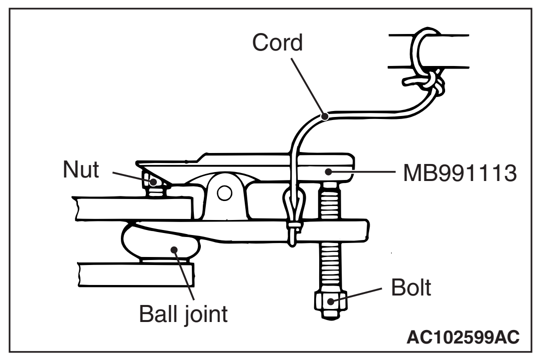
1. Install special tool ball joint remover (MB991897 or MB992011) as shown in the figure.



2. Turn the bolt and knob as necessary to make the jaws of special tool parallel, tighten the bolt by hand and confirm that the jaws are still parallel.

   NOTE: When adjusting the jaws in parallel, make sure the knob is in the position shown in the figure.
3. Tighten the bolt with a wrench to disconnect the tie rod end, lower arm ball joint.

<4G1>



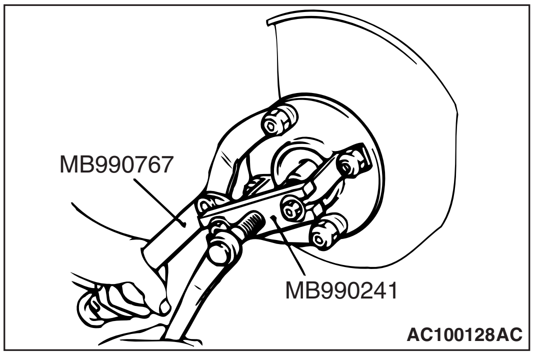
Replace the self-locking nut with a regular nut, and then install special tool steering linkage puller (MB991113) as shown in the figure.

Main Index
Group TOC

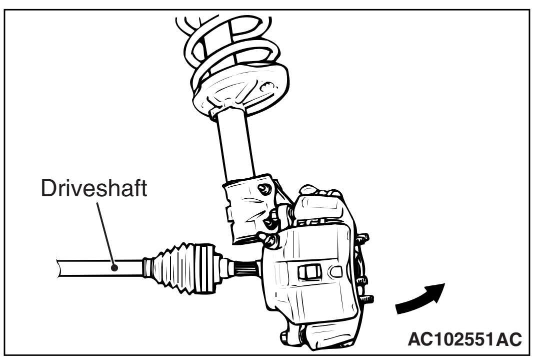
<<C>> DRIVESHAFT ASSEMBLY/DRIVESHAFT (LH)/DRIVESHAFT (RH) REMOVAL

⚠ CAUTION

- **The magnetic encoder collects any metallic particle easily, because it is magnetized. Make sure that the magnetic encoder does not collect any metallic particle.**
- **When the driveshaft is removed, make sure that it does not contact with the magnetic encoder to avoid damage.**



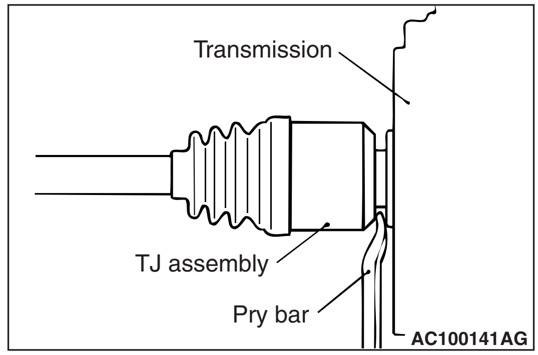
1. Use the following special tools to push out the driveshaft assembly from the hub.
   - Front hub & flange yoke holder (MB990767)
   - Axle shaft puller (MB990241)



2. Remove the driveshaft from the hub by pulling the bottom of the brake disc towards you.

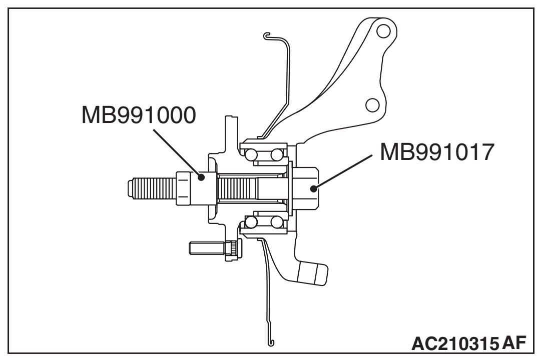
⚠ CAUTION

- **Do not pull on the driveshaft from the wheel side; doing so will damage the TJ; be sure to use the pry bar.**
- **When pulling the driveshaft out from the transmission, be careful that the spline part of the driveshaft does not damage the oil seal.**



3. Insert a pry bar between the transmission case and the driveshaft, and then pry and remove the driveshaft from the transmission.

⚠ CAUTION



Do not apply pressure to the wheel bearing by the vehicle weight to avoid possible damage when the driveshaft is removed. If, however, vehicle weight must be applied to the bearing in moving the vehicle, temporarily secure the wheel bearing by using the following special tools.

- **Spacer (MB991000)**
- **Front hub remover and installer (MB991017)**

Main Index
Group TOC

INSTALLATION SERVICE POINTS

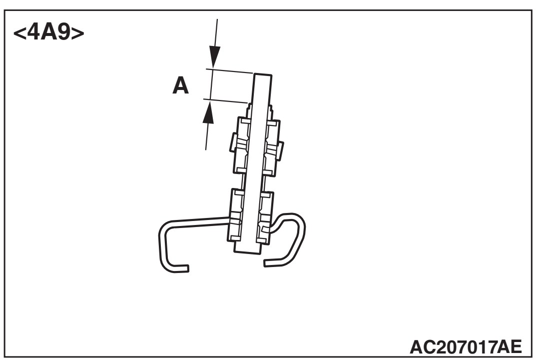
>>A<< DRIVESHAFT ASSEMBLY/DRIVESHAFT (RH)/DRIVESHAFT (LH) INSTALLATION

⚠ CAUTION

- **The magnetic encoder collects any metallic particle easily, because it is magnetized. Make sure that the magnetic encoder should not collect any metallic particle. Check that there is not any trouble prior to reassembling it.**
- **When the driveshaft is installed, make sure that it does not contact with the magnetic encoder to avoid damage.**
- **When installing the driveshaft, be careful that the spline part of the driveshaft do not damage the oil seal.**

>>B<< STABILIZER RUBBER/SELF-LOCKING NUT/STABILIZER LINK BUSH (B)/STABILIZER LINK ASSEMBLY/STABILIZER LINK BUSH (A) INSTALLATION

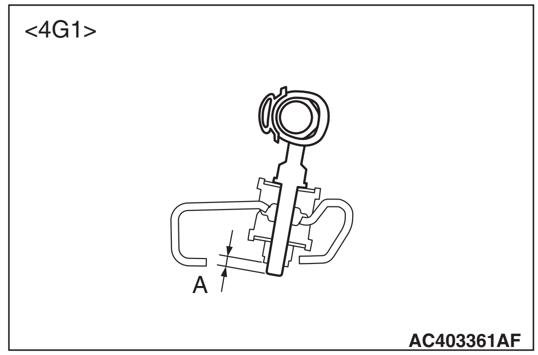
<4A9>



Install the stabilizer rubber as shown in the figure, and tighten the self-locking nut so that the protruding length of the stabilizer bar mounting bolt or the protruding length of the stabilizer link assembly meets its standard value (A).

Standard value (A): 19 ± 1.5 mm

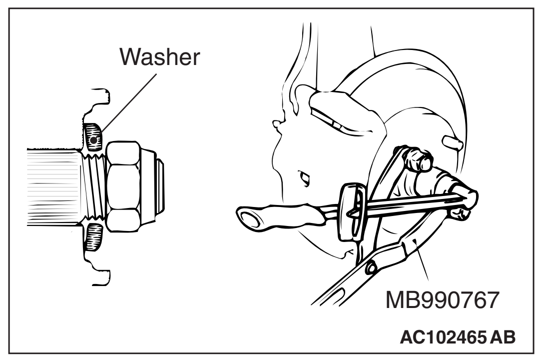
<4G1>



Install the stabilizer link bush (B), stabilizer link assembly and stabilizer link bush (A) as shown in the figure, and tighten the stabilizer link bush (A) so that the protruding length of the stabilizer link assembly meets its standard value (A).

Standard value (A): 5 ± 1.5 mm

>>C<< WASHER/DRIVESHAFT NUT INSTALLATION



1. Be sure to install the driveshaft washer in the specified direction.

⚠ CAUTION

Before securely tightening the driveshaft nuts, make sure there is no load on the wheel bearings. Otherwise the wheel bearing will be damaged.

2. Using special tool front hub & flange yoke holder (MB990767), tighten the driveshaft nut to the specified torque.

Tightening torque: 245 ± 29 N·m

Main Index
Group TOC

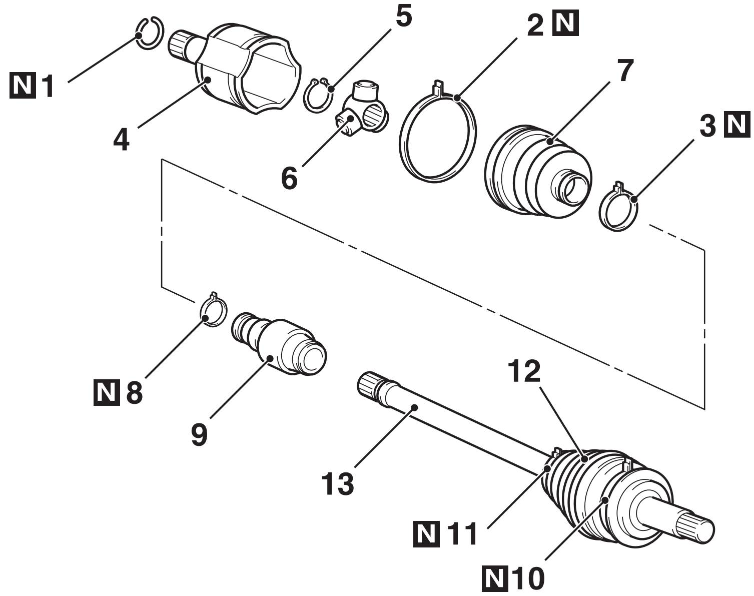
DISASSEMBLY AND REASSEMBLY

M1261003701244

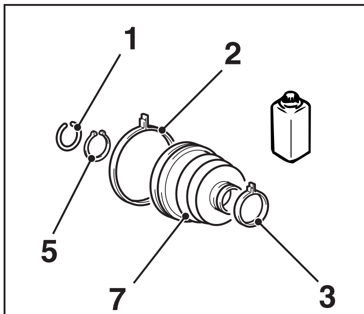
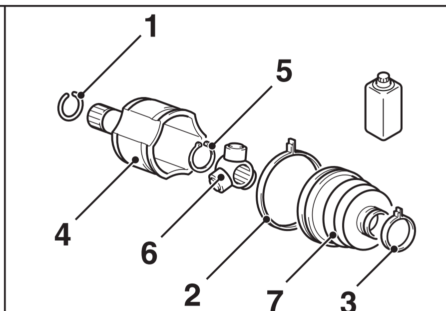
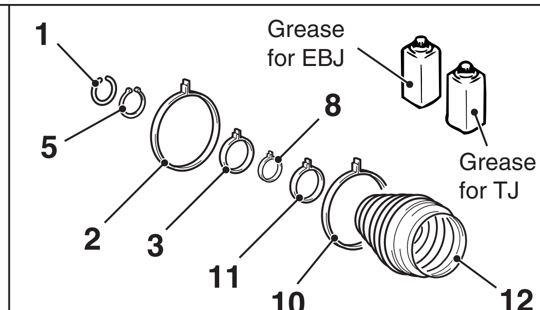
⚠ CAUTION

Never disassemble the EBJ assembly except when replacing the EBJ boot.

<4A9>



AC208766 AF

		
TJ boot repair kit	**TJ repair kit**	**EBJ boot repair kit**

Disassembly steps

		1.	Circlip
	>>**D**<<	2.	TJ boot band (large)
	>>**D**<<	3.	TJ boot band (small)
<<**A**>>	>>**C**<<	4.	TJ case
		5.	Snap ring
<<**A**>>	>>**B**<<	6.	Spider assembly
<<**B**>>	>>**A**<<	7.	TJ boot
	>>**A**<<	8.	Damper band

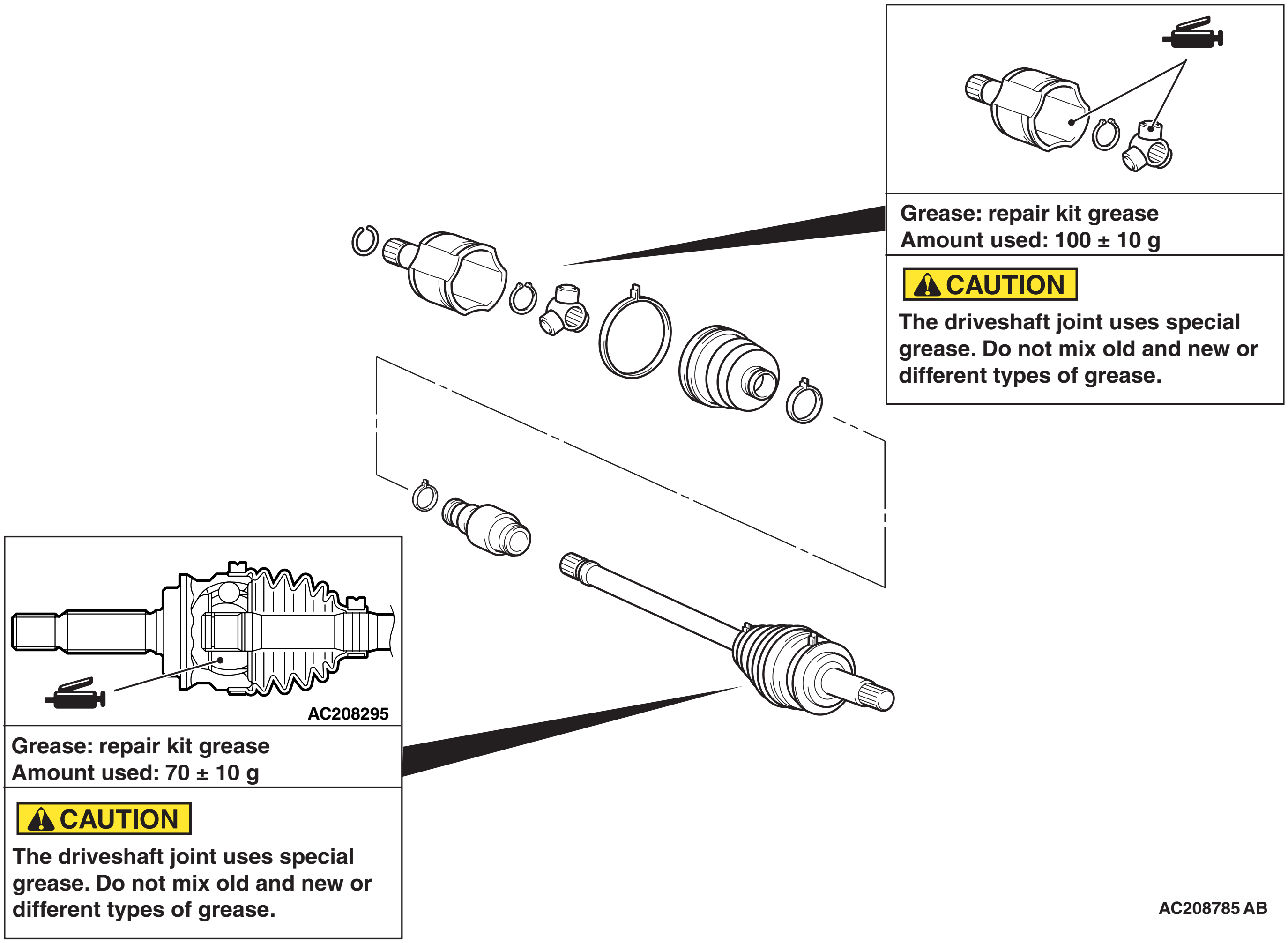
Disassembly steps (Continued)

>>**A**<<	9.	Dynamic damper
	10.	EBJ boot band (large)
	11.	EBJ boot band (small)
	12.	EBJ boot
	13.	EBJ assembly

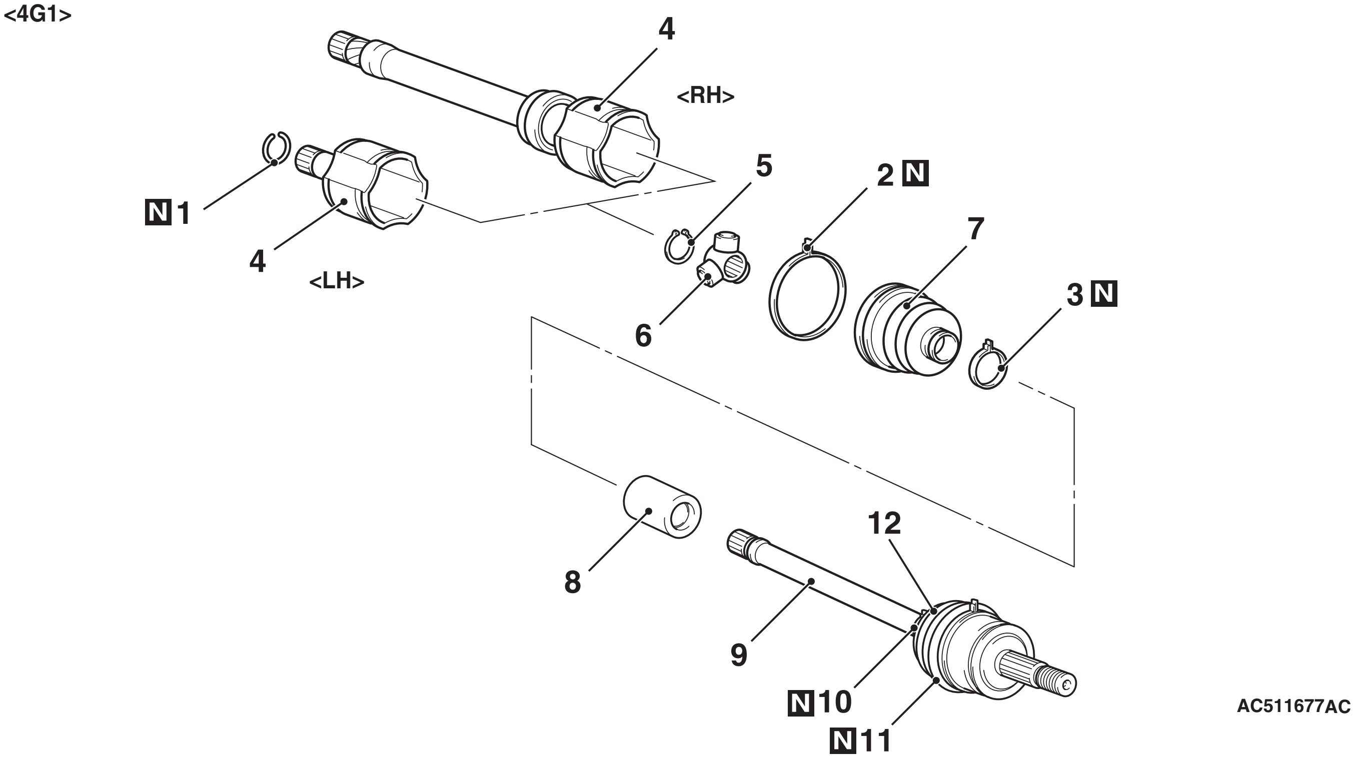
EBJ:Eight Ball Fixed Joint

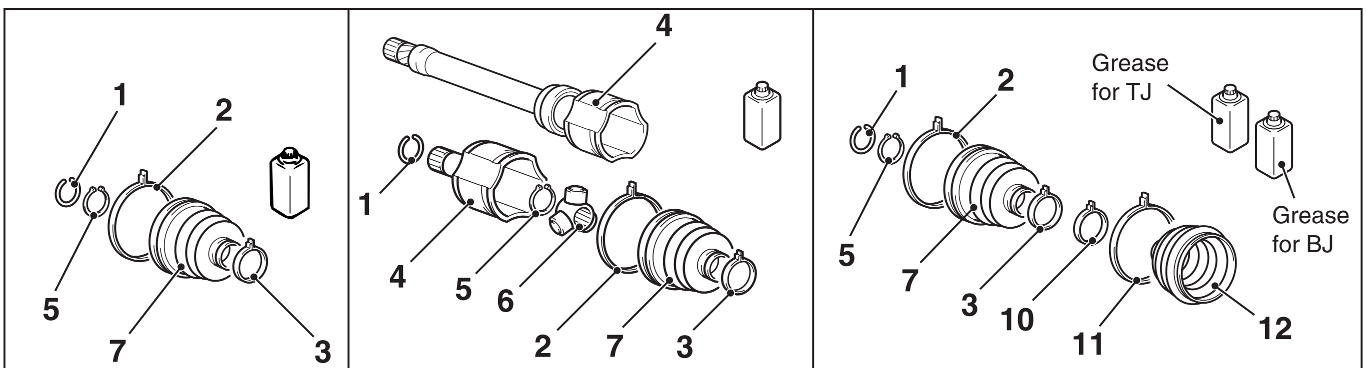
Main Index
Group TOC

LUBRICATION POINTS



Main Index
Group TOC





TJ boot repair kit | TJ repair kit | BJ boot repair kit

Disassembly steps

		1.	Circlip
	>>**D**<<	2.	TJ boot band (large)
	>>**D**<<	3.	TJ boot band (small)
<<**A**>>	>>**C**<<	4.	TJ case
		5.	Snap ring
<<**A**>>	>>**B**<<	6.	Spider assembly
<<**B**>>	>>**A**<<	7.	TJ boot
	>>**A**<<	8.	Dynamic damper

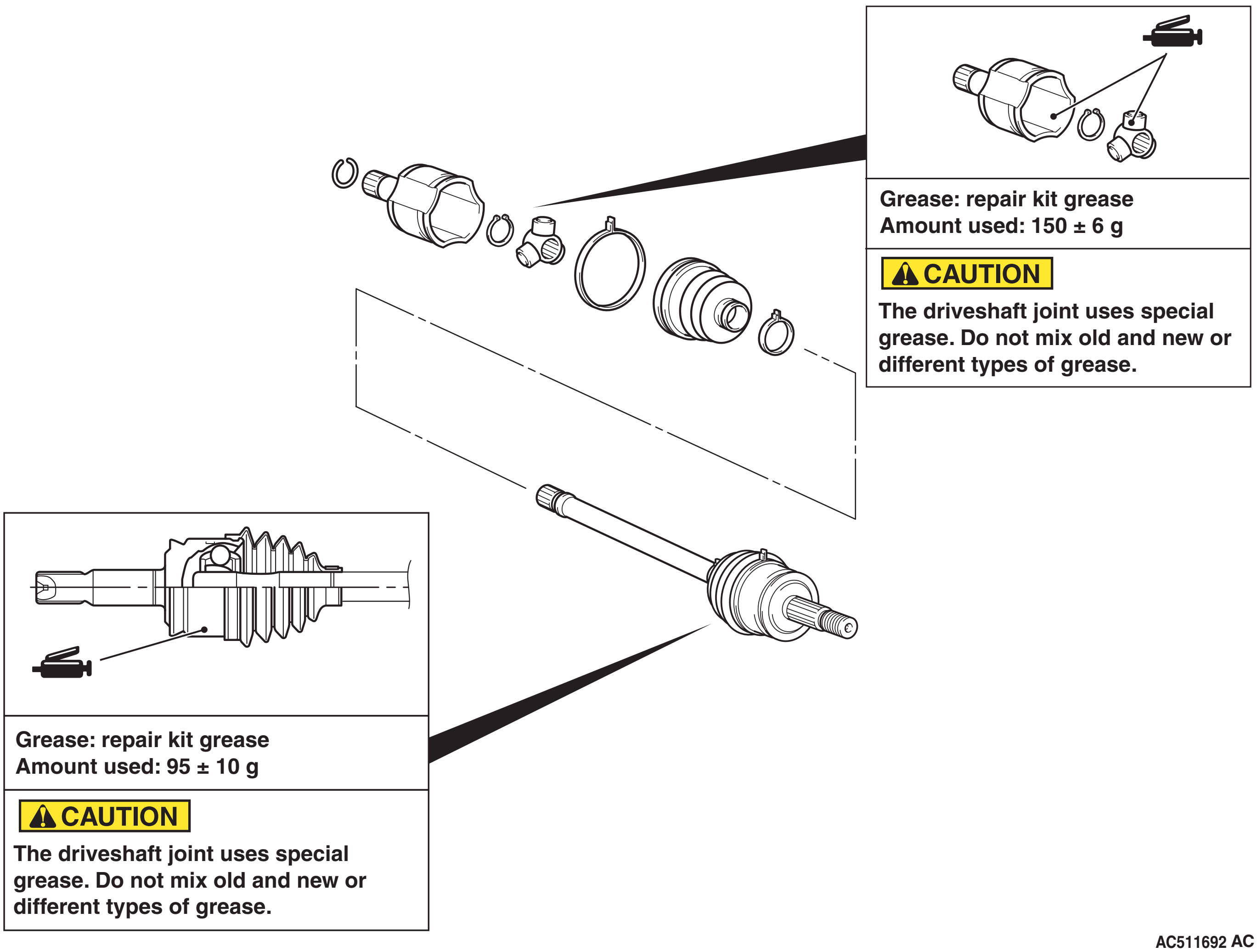
TJ: Tripod Joint
BJ: Birfield Joint

Disassembly steps (Continued)

9. BJ assembly
10. BJ boot band (small)
11. BJ boot band (large)
12. BJ boot

Main Index
Group TOC

LUBRICATION POINTS



DISASSEMBLY SERVICE POINTS

<<A>> TJ CASE/SPIDER ASSEMBLY REMOVAL

⚠ CAUTION

Do not disassemble the spider assembly.

1. Wipe off grease from the spider assembly and the inside of the TJ case.
2. Always clean the spider assembly when the grease contains water or foreign material.

<<B>> TJ BOOT REMOVAL

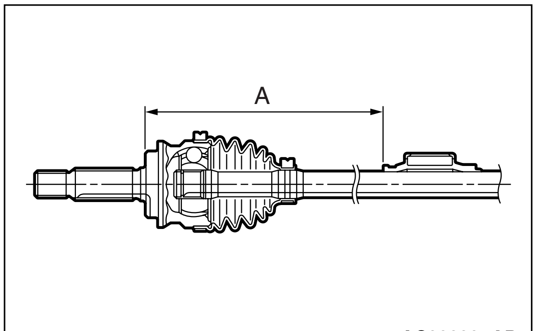
1. Wipe off grease from the shaft spline.
2. When reusing the TJ boot, wrap plastic tape around the shaft spline to avoid damaging the boot.

REASSEMBLY SERVICE POINTS

>>A<< DYNAMIC DAMPER/DAMPER BAND/TJ BOOT INSTALLATION

⚠ CAUTION

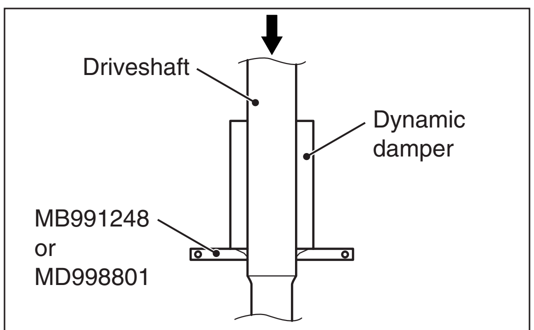
There should be no grease adhered to the rubber part of the dynamic damper.



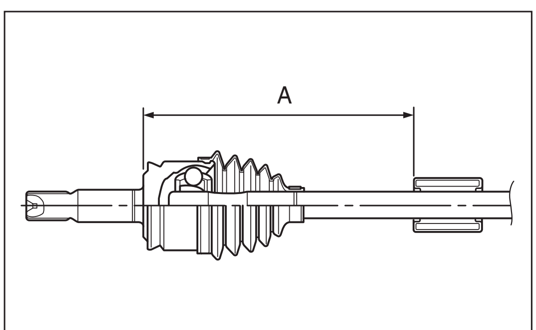
AC208295AD

1. For vehicles with 4A9, Install the dynamic damper in the position shown in the figure.

   A:
   220 ± 3 mm (LH)
   380.5 ± 3 mm (RH)



AC311709AB



AC511676AC

2. For vehicles with 4G1, press-fit the dynamic damper by using special tool inner shaft remover (MB991248 or MD998801) in the position shown in the figure.

   A: 231 ± 3 mm

3. Wrap plastic tape around the shaft spline, and then install the TJ boot band (small) and TJ boot.

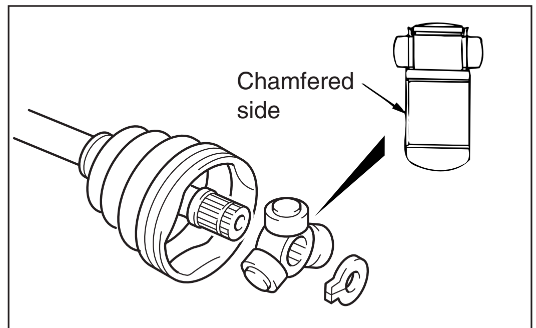
>>B<< SPIDER ASSEMBLY INSTALLATION

⚠ CAUTION

- **The driveshaft joint use special grease. Do not mix old and new or different types of grease.**
- **If the spider assembly has been cleaned, take special care to apply the specified grease.**

1. Apply the specified grease furnished in the repair kit to the spider assembly between the spider axle and the roller.

   Specified grease: Repair kit grease



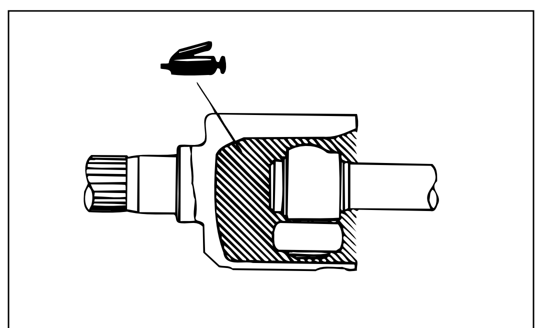
AC102654AC

2. Install the spider assembly to the shaft from the direction of the spline chamfered side.

>>C<< TJ CASE INSTALLATION

⚠ CAUTION

The driveshaft joint use special grease. Do not mix old and new or different types of grease.


AC102656AC

After applying the specified grease to the TJ case, insert the driveshaft and apply grease one more time.

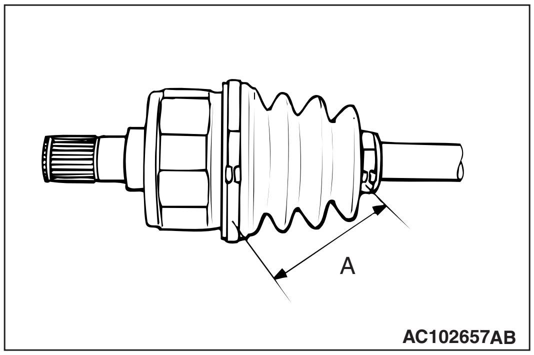
Specified grease: Repair kit grease
Amount to use : 100 ± 10 g <4A9>
(inside of joint : 65 ± 5 g, inside of boot : 35 ± 5 g)
Amount to use : 150 ± 6 g <4G1>

NOTE: The grease in the repair kit should be divided in half for use, respectively, at the joint and inside the boot.

Main Index
Group TOC

>>D<< TJ BOOT BAND (SMALL)/TJ BOOT BAND (LARGE) INSTALLATION

<4A9>

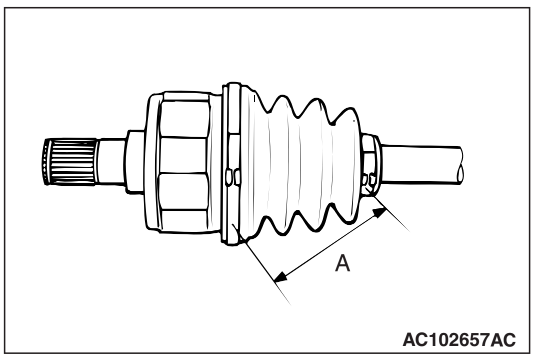


AC102657AB

Set the TJ boot bands at the specified distance in order to adjust the amount of air inside the TJ boot, and then tighten the TJ boot band (small), TJ boot band (large) securely.

Standard value: 80 ± 3 mm

<4G1>

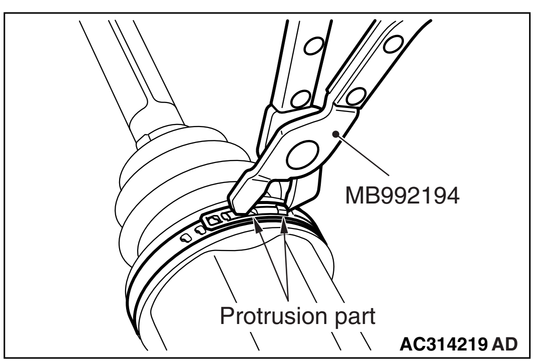


AC102657AC

1. Set the TJ boot bands at the specified distance in order to adjust the amount of air inside the TJ boot, and then tighten the TJ boot band (small) securely.

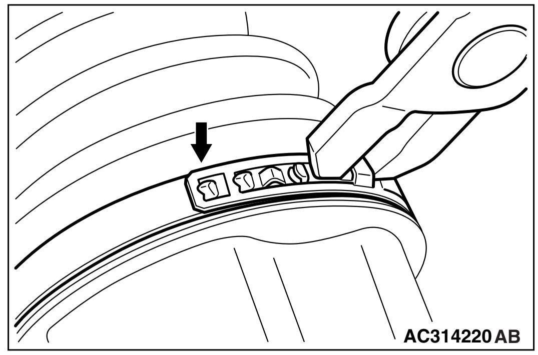
   Standard value (A): 80 ± 3 mm

2. Install the TJ boot band (large) by following the next steps.



AC314219 AD

(1) Use specila tool boot band clipping tool (MB992194) to catch the protrusion part of the TJ boot band (large) and tighten it firmly.

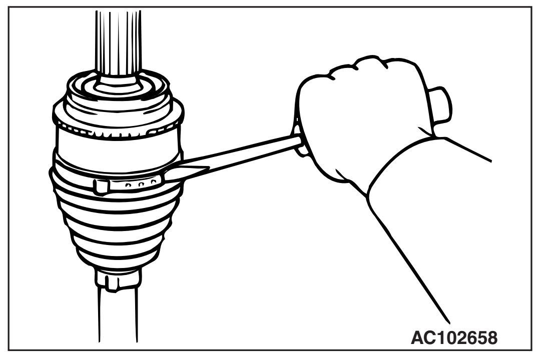


AC314220 AB

(2) After having tightened securely the protrusion part of the TJ boot band (large), hook the end of the TJ boot band (large) as shown in the illustration.

EBJ BOOT (RESIN BOOT) REPLACEMENT

M1261007500012

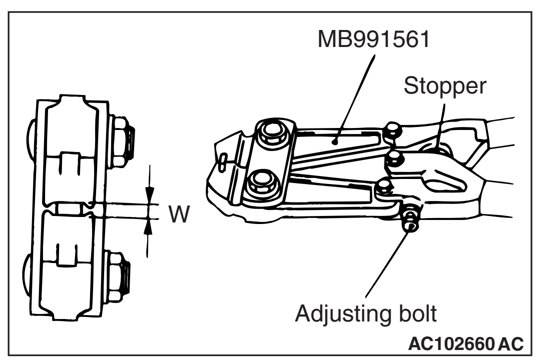


AC102658

1. Remove the boot bands (large and small).

   NOTE: The boot bands cannot be re-used.

2. Remove the EBJ boot.
3. Wrap a plastic tape around the shaft spline, and assemble the boot band and EBJ boot.



AC102660 AC

4. Turn the adjusting bolt on special tool boot band crimping tool (MB991561) so that the size of the opening (W) is at the standard value.

   Standard value (W): 3.9 mm

   <If it is larger than 3.9 mm> Tighten the adjusting bolt.

   <If it is smaller than 3.9 mm> Loosen the adjusting bolt.

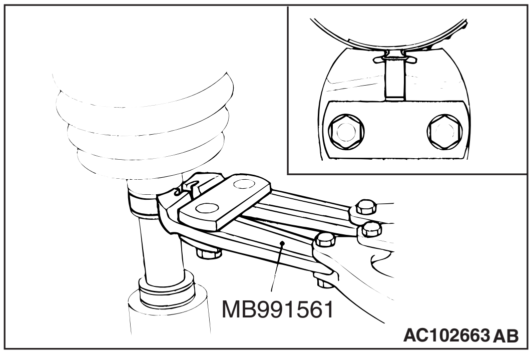
Main Index
Group TOC

NOTE: The value of W will change by approximately 0.7 mm for each turn of the adjusting bolt.

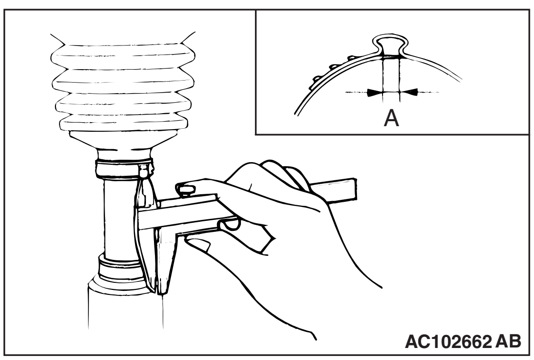
NOTE: The adjusting bolt should not be turned more than once.

⚠ CAUTION

- **Secure the driveshaft in an upright position and clamp part of the boot band to be crimped securely in the jaws of special tool.**
- **Crimp the boot band until special tool touches the stopper.**



5. Use the special tool to crimp the boot band (small).



6. Check that the crimping amount (A) of the boot band is at the standard value.

Standard value (A): 1.2 − 4.5 mm

<If the crimping amount is larger than 4.5 mm >

Readjust the value of (W) in step 4 according to the following formula, and then repeat the operation in step 5.

<If the crimping amount is smaller than 1.2 mm >

Remove the EBJ boot band, readjust the value of (W) in step 4, and then repeat the operations in steps 4 and 5 using a new EBJ boot band.

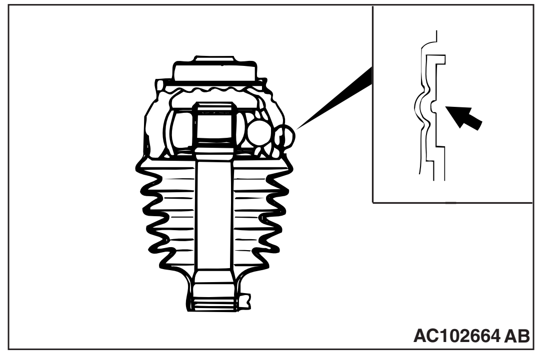
7. Check that the boot band is not sticking out past the place where it has been installed. If the boot band is sticking out, remove it and then repeat steps 5 to 6, using a new boot band.

⚠ CAUTION

The driveshaft joint uses special grease. Do not mix old and new or different types of grease.

8. Fill the inside of the boot with the specified amount of the specified grease.

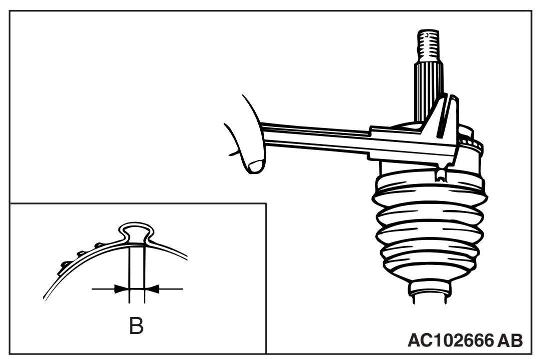
Specified grease: Repair kit grease
Amount to use : 70 ± 10 g
(Inside of joint : 35 ± 5 g, inside of boot : 35 ± 5 g)



9. Install the BJ boot big end on the BJ case groove.
10. Follow the same procedure as in step 4 to adjust the size of the opening (W) on the special tool so that it is at the standard value.

Standard value (W): 3.9 mm

11. Use the special tool to crimp the EBJ boot band (large) in the same way as in step 6.



12. Check that the crimping amount (B) of the boot band is at the standard value.

Standard value (B): 1.2 − 4.5 mm

<If the crimping amount is larger than 4.5 mm >

Readjust the value of (W) in step 10, and then repeat the operation in step 11.

<If the crimping amount is smaller than 1.2 mm >

Remove the EBJ boot band, readjust the value of (W) in step 10, and then repeat the operations in steps 11 using a new BJ boot band.

Main Index
Group TOC

13. Check that the boot band is not sticking out past the place where it has been installed. If the boot band is sticking out, remove it and then repeat steps 9 to 12, using a new boot band.

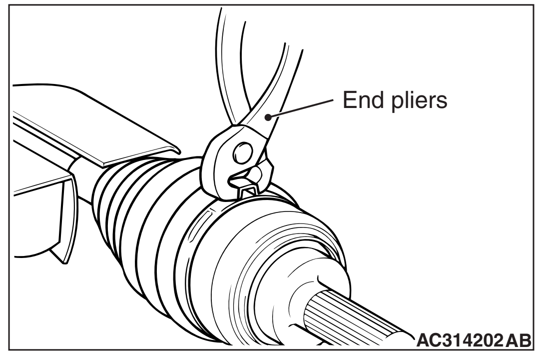
BJ BOOT (RESIN BOOT) REPLACEMENT

M1261005200509

1. Cut the boot bands (large and small).

   NOTE: The boot bands cannot be re-used.

2. Replace the BJ boot.



3. Using the end pliers, tighten the boot band.